

MSCI CUSTOM RISK WEIGHTED INDEXES

An Approach to Combining Low Risk and Size Exposure

Index Marketing

December 2016

- The MSCI Risk Weighted Indexes are uniquely designed to reflect the low volatility and smaller size effect
- The indexes employ a simple yet effective method to overweight low risk and smaller market cap stocks
- The MSCI Risk Weighted Indexes can be replicated cost-effectively, used to benchmark low volatility managers, and in combination with other MSCI Factor Indexes
- The MSCI World Risk Weighted Top 200 Index is customized to contain a maximum of 200 stocks

Why Do Investors Use Risk Weighted Strategies?

- Reduction of portfolio risk by about 10% over the long-term, with less drawdown than the broad market
- Historically, these strategies have yielded higher risk-adjusted returns
- To gain exposure to smaller size stocks, mostly mid-caps, while maintaining a structural bias towards less volatile stocks

Key Characteristics of the MSCI Risk Weighted Indexes

- Effective and transparent risk reduction weighting via the inverse of realized variance
- Emphasis on low risk and smaller market cap stocks
- Number of constituents from the parent index is customizable (e.g., the top 200)
- Low annual index turnover
- High investability and replicability

Upside and Downside Capture

- The upside and downside capture ratios of a risk weighted index indicate how it has performed over periods of market strength and weakness relative to its parent index
- Since May 2003 through Dec 2016, the MSCI World Risk Weighted Top 200 Index captured 70% of the positive returns of its parent
- Over the same period, the MSCI World Risk Weighted Top 200 Index lost just 36% relative to the losses of the parent

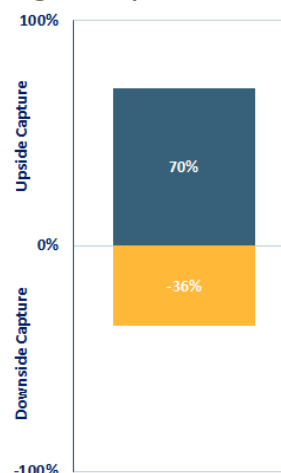
Performance Characteristics: Net Returns of the MSCI World Risk Weighted Top 200 and MSCI World Indexes (CAD)—(May 2003 – Dec 2016)



Historical Net Total, CAD	MSCI World	MSCI World Risk Weighted Top 200
Total Return* (%)	7.32	9.54
Return Risk* (%)	11.07	8.92
Risk Adjusted Return	0.66	1.07
Active Return* (%)	0.00	2.22
Tracking Error* (%)	0.00	7.81
Information Ratio	N/A	0.28

* Annualized from May 2003 to Dec 2016

Upside & Downside Capture:
MSCI World Risk Weighted Top 200 Index vs. MSCI World Index



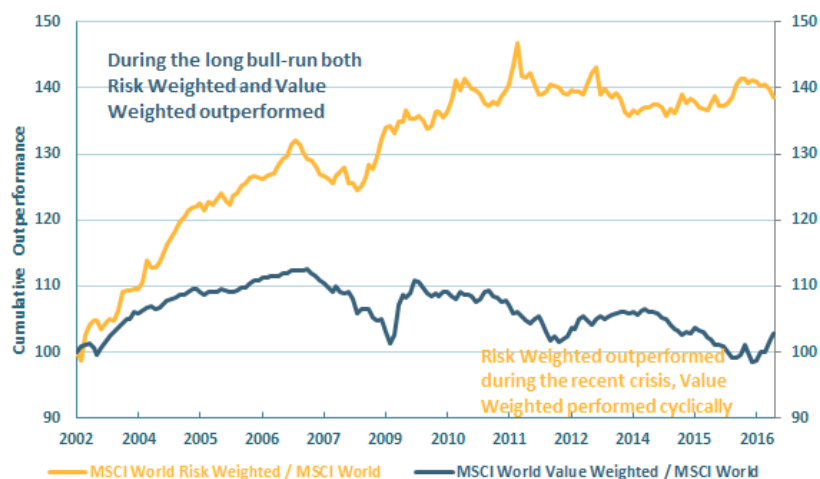
MSCI Customized Risk Weighted Methodology Highlights

Parameter	Methodology	Comments
Universe	All constituents of the market cap-weighted parent index are assigned a security-level risk weight and ranked so that stocks with lower risk have higher index weights; the top 200 securities with the highest weights are then selected	Approach obtains a targeted low volatility opportunity set
Variables	3-year historical variance	Objective measure that captures the variation of historical volatility
Weighting	The index first reweights every security in the parent index so that stocks with lower risk (based on their 3-year variance) are given higher risk weights. The final constituents of the MSCI Risk Weighted Top 200 Index are determined by ranking these security level risk weights and taking the top 200 subset securities	Effective and transparent risk reduction weighting
Rebalancing	Semi-annual	Timely data updates, consistent with the MSCI rebalancing calendar

Combining MSCI Factor Indexes

- MSCI Risk Weighted, Value Weighted, Quality and other MSCI Factor Indexes have outperformed their cap-weighted parent indexes over long periods
- However, performance is cyclical: any strategy can underperform for long periods
- A higher level of diversification may be achieved by combining two or more of these MSCI Factor Indexes
- Combining these indexes into a portfolio may also reduce overall cost by exploiting natural internal “cross opportunities” at each rebalancing

Combining MSCI World Risk Weighted and Value Weighted Indexes (USD)



CONTACT US

clientservice@msci.com

AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
Sao Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Tokyo	+ 81 3 5290 1555

* = toll free

ABOUT MSCI

For more than 40 years, MSCI's research-based indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

For more information, visit us at www.msci.com.

NOTICE AND DISCLAIMER

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the “Information”) is the property of MSCI Inc. or its subsidiaries (collectively, “MSCI”), or MSCI’s licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the “Information Providers”) and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, “Index Linked Investments”). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investable assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research Inc. and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.’s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.’s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research Inc. is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI’s products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, FEA, InvestorForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor’s. “Global Industry Classification Standard (GICS)” is a service mark of MSCI and Standard & Poor’s.